15

## What is claimed is:

- 1. A system for providing a multi Internet connection in a cable network system, comprising:
- a first and a second cable modem (CM) for modulating digital data signal from subscribers to radio frequency (RF) signal;
  - a first filtering means, connected to the first CM, for filtering the modulated RF signal from the first CM;
- a transmission means for transmitting the filtered modulated RF signal and the modulated RF signal from the second CM;
  - a second filtering means, connected to the transmission means, for filtering the modulated RF signal transmitted through the transmission means to thereby pass the filtered modulated RF signal from the first filtering means;
- a first cable modem termination system (CMTS), connected to the second filtering means, for demodulating the filtered modulated RF signal filtered by the second filtering means back to the digital data signal, scanning the digital data signal and identifying a registered subscriber to thereby connect the subscriber to a corresponding host server; and
- 25 a second CMTS for demodulating the transmitted modulated RF signal back to the digital data signal and

scanning the digital data signal and identifying a registered subscriber to thereby connect the subscriber to a corresponding host server.

- 5 2. The system of claim 1, wherein the first and the second filtering means are high pass filters, respectively.
  - 3. The system of claim 1, the first and the second filtering means are band pass filters, respectively.
  - 4. The system of claim 2, the first and the second filtering means are 32 MHz high pass filters, respectively.
- 5. The system of claim 3, the first and the second filtering means are 16 to 32 MHz band pass filters, respectively.
  - 6. The system of claim 1, the transmission means is a hybrid fiber coaxial (HFC) cable.

20

10